

**ARIZONA GAME AND FISH DEPARTMENT
HABITAT PARTNERSHIP COMMITTEE
HABITAT ENHANCEMENT AND WILDLIFE MANAGEMENT PROPOSAL**

Game Branch / HPC Project Number:	12-112
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PROJECT INFORMATION

Project Title: Rodeo-Chediski Prescribed Burning – Stermer Ridge Block

Region and Game Management Unit: Region I - Unit 3C

Local Habitat Partnership Committee (LHPC):

- Show Low

Was the project presented to the LHPC?

YES[X] NO[]

Has this project been submitted in previous years? YES[] NO[x]

If Yes, was it funded? YES[] NO[] → **HPC Project #:**

Project Type: Prescribed Burning

Brief Project Summary:

Application of prescribed fire through broadcast burning to reinvigorate forage production and to consume deadfall and invading juniper and oak trees in the Rodeo-Chediski Fire area.

Big Game Wildlife Species to Benefit: 45% deer 40% elk 15% turkey

Implementation Schedule (Month/Day/Year):

Project Start Date:
Fall 2013

Project End Date:
Winter 2014

Environmental Compliance:

NEPA Completed: YES[x] No[] N/A[]

Projected Completion Date: February 22, 2012

State Historic Preservation Office - Archaeological Clearance:

YES[] No[] N/A[]

Projected Completion Date: Will know by mid Sept 2012 if additional archaeological clearances will be required

Arizona Game and Fish Department EA Checklist: N/A[]

To be Completed by: Paul Greer

Projected Completion Date: February 2013

PROJECT FUNDING

Special Big Game License Tag Funds Requested:

\$82,000.00

Cost Share or Matching Funds:

\$ 50,000.00

Total Project Costs:

\$ 132,000.00

PARTICIPANT INFORMATION

Applicant (please print):

Paul Greer

Address:

2878 E. White Mtn Blvd
Pinetop, AZ 85935

E-mail:

jgreer@azgfd.gov

Telephone: 928-358-8905

Date: 8-26-2012

AGFD Contact and Phone No. (If applicant is not AGFD personnel):

Project has been coordinated with: Black Mesa Ranger District Ranger, Dee Hines; Assistant Fire Management Officer-Fuels, John Manthei; Fire Management Officer, Gary Strickland; Wildlife Biologist, Rachel Vaughn; Silviculturalist, Gayle Richardson

NEED STATEMENT – PROBLEM ANALYSIS:

During June and July of 2002 two separate human caused wildfires grew together to become what was at the time the largest wildfire in Arizona history. The Rodeo-Chediski Fire burned in a mosaic pattern which greatly enhanced the deer and elk habitat in the central and southern portion of Game Management Unit 3C and on the adjacent White Mountain Apache Reservation which bounds the unit to the south. The removal of large amounts of dense ponderosa pine canopies in areas where burn severities were high created an abundance of open areas across the project area. As a result, herbaceous forage production, as well as browse species abundance, increased considerably from pre-fire conditions. The robust stands of Fendler ceanothus (commonly referred to as buck brush) that have established in the burn area provide a staple in the nutritional requirements of the Unit 3C mule deer herd as well as an important forage component for the unit's elk herd from late fall into early spring. Other browse species such as cliffrose have become well established in areas within the burn where soil types are favorable for this species. The mosaic burn pattern of the fire resulted in a dramatic increase in the amount of "edge" type habitat which benefits many game species including deer, elk and turkey by providing foraging areas in close proximity to hiding and thermal cover. The large removal of timber also contributed to an increase in ground flow to many of the natural springs within the unit, further improving water distribution for wildlife.

In order to maintain the abundance and vigor of the ceanothus stands within the burn area, fire should be applied to the area between 10 to 15 years after the first fire entry. Research has shown that Fendler ceanothus will respond to fire by increased production of stem growth on burned plants as well as increased germination of seeds in the soil seed bank after exposure to heat from the fire. Prescribed fire will also be necessary to maintain open areas created during the Rodeo-Chediski Fire that have resulted in the substantial increase in forage production from the pre-fire conditions. Without fire, these openings will become choked out by the already regenerating gambel oak, alligator juniper and ponderosa pine resulting in decreased forage and habitat conditions.

PROJECT OBJECTIVES:

Maintain the positive effects of the wildfire through prescribed burning:

- Maintain the abundance and vigor of the existing browse stands
- Enhance the herbaceous forage diversity and production
- Reduce forest fuels and densities of emergent juniper and oak trees to sustain open areas
- Reestablish a natural fire disturbance regime
- Improve upland watershed conditions

PROJECT DESCRIPTION AND STRATEGIES:

The project is part of the Rodeo-Chediski Fire prescribed burn project which covers 148,222 acres across the Black Mesa and Lakeside Ranger Districts south of Highway 260 in Unit 3C. Due to many limitations, both biological and social, it will not be feasible to apply prescribed fire to the entire project area within one grant cycle. In an effort to ensure the benefits of prescribed burning are evenly distributed across the project area, multiple burn blocks have been identified within the project area based on existing habitat conditions within each block. The intent of this project is to annually seek funding through the HPC grant process and other grant opportunities in order to apply fire to one block, or several smaller blocks, at a time. The determination of which block to burn will be affected by status of archaeological clearances, livestock grazing pastures, watershed management, spotted owl and goshawk survey requirements and location of burn blocks already

treated.

The Stermer Ridge block was identified in coordination with the Black Mesa Ranger District as ready to burn. The only potential restriction to burning in this block may be archaeological clearances. The District Ranger has committed to determine if additional archaeological clearances will be required prior to burning by mid-September 2012. However, the seasonal limitations on when broadcast burning can be implemented would make fall of 2013 the soonest any burning funded by this grant could take place. The project applicant, Paul Greer, will be in close coordination with the District Ranger to follow this progress.

PROJECT LOCATION:

See attach maps.

LAND OWNERSHIP AT PROJECT SITE (Please state specifically if PRIVATE PROPERTY and provide landowner's name):

Apache-Sitgreaves National Forest

IF PRIVATE PROPERTY, IS THERE A STEWARDSHIP or LANDOWNER AGREEMENT BETWEEN THE LANDOWNER AND THE DEPARTMENT?

YES[] NO[]

HABITAT DESCRIPTION:

Ponderosa Pine forest type intermixed with Oak and Juniper woodland

ITEMIZED USE OF FUNDS:

Acres to burn: 4,000

Cost to apply prescribed fire: \$33/acre (including preparatory work on fire perimeter)

Implementation cost to apply broadcast prescribed fire to Stermer Ridge Block: \$132,000

Special Big Game License Tag Funds

\$82,000 for application of prescribed fire in Stermer Ridge Block

Cost Share or Matching Funds

\$50,000 for preparatory work on fire perimeter

\$145,453 spent by USFS to complete NEPA requirements to use prescribed fire in the project area

LIST COOPERATORS AND DESCRIBE POTENTIAL PARTICIPATION:

- US Forest Service Black Mesa RD

PROJECT MONITORING PLAN:

Photo points will be established in selected areas of the project area to document pre and post project vegetative conditions. Helicopter surveys for elk and deer are conducted annually to monitor population trends and sex ratios.

PROJECT MAINTENANCE:

Each burn block should have a reentry of prescribed fire within 10 to 15 years after the first prescribed burn in that block.

Figure 1: Overview of Rodeo-Chediski Fire Prescribed Burn Project

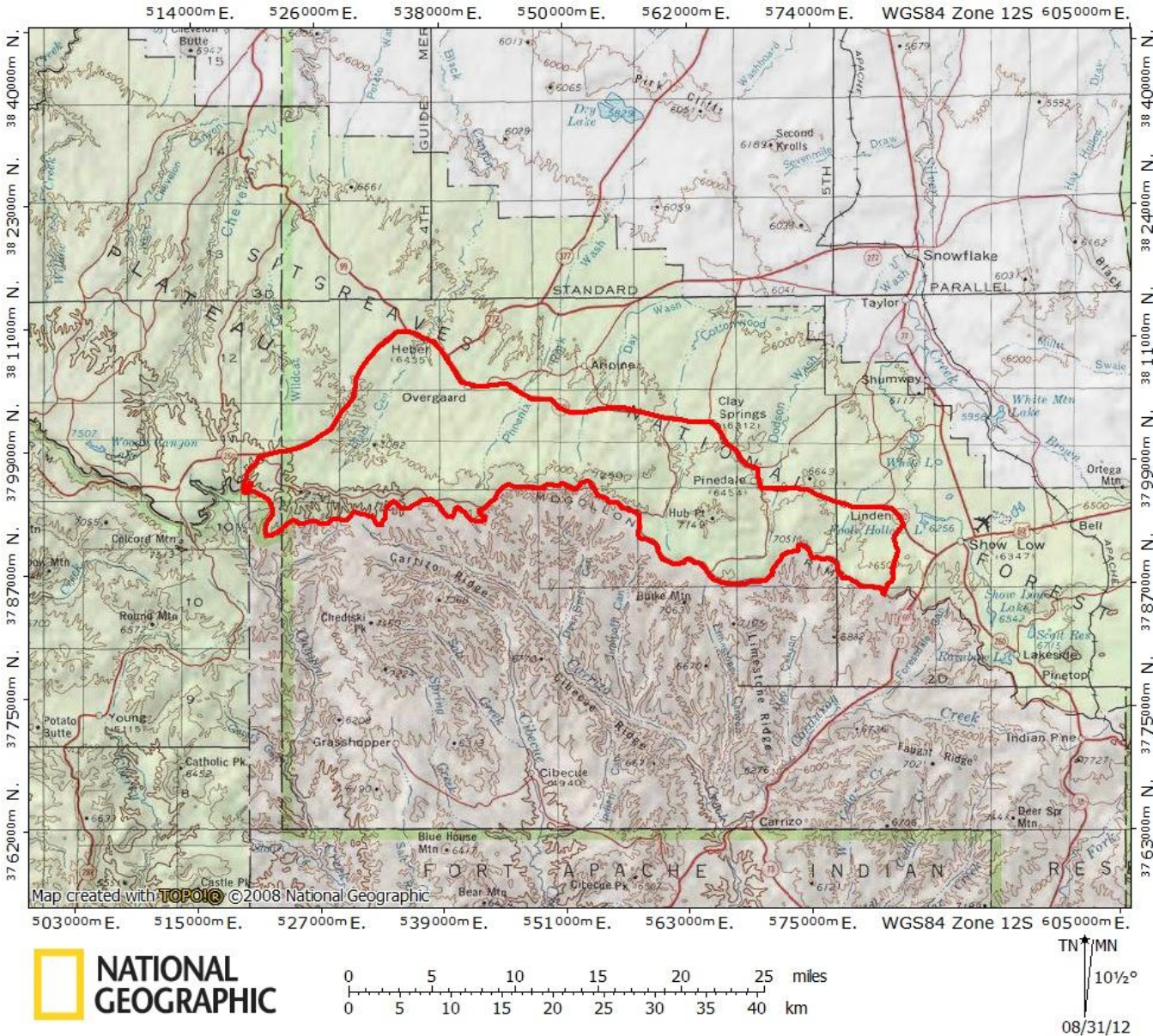


Figure 2: Overview of Stermer Ridge Burn Block

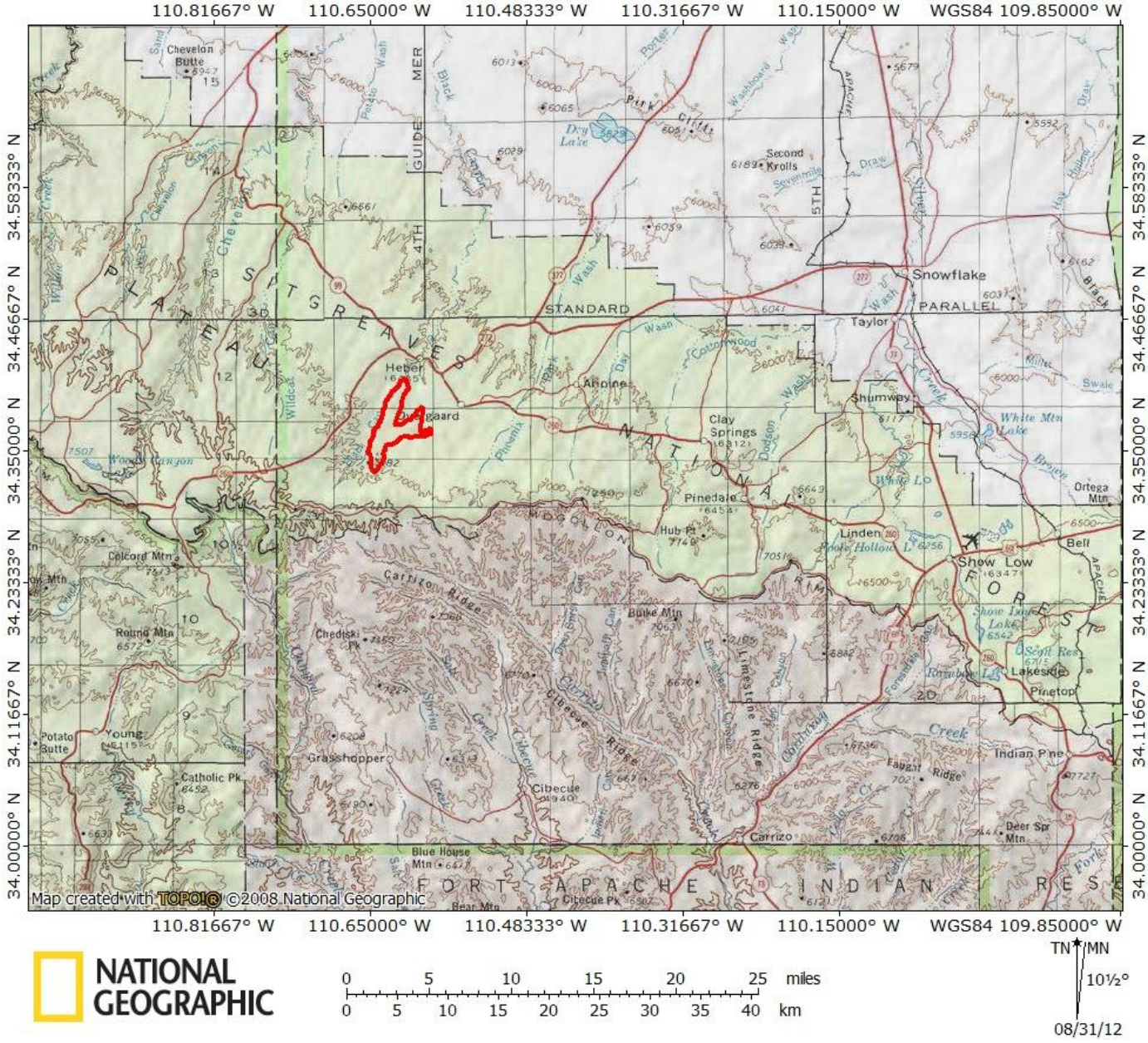


Figure 3: Stermer Ridge Burn Block

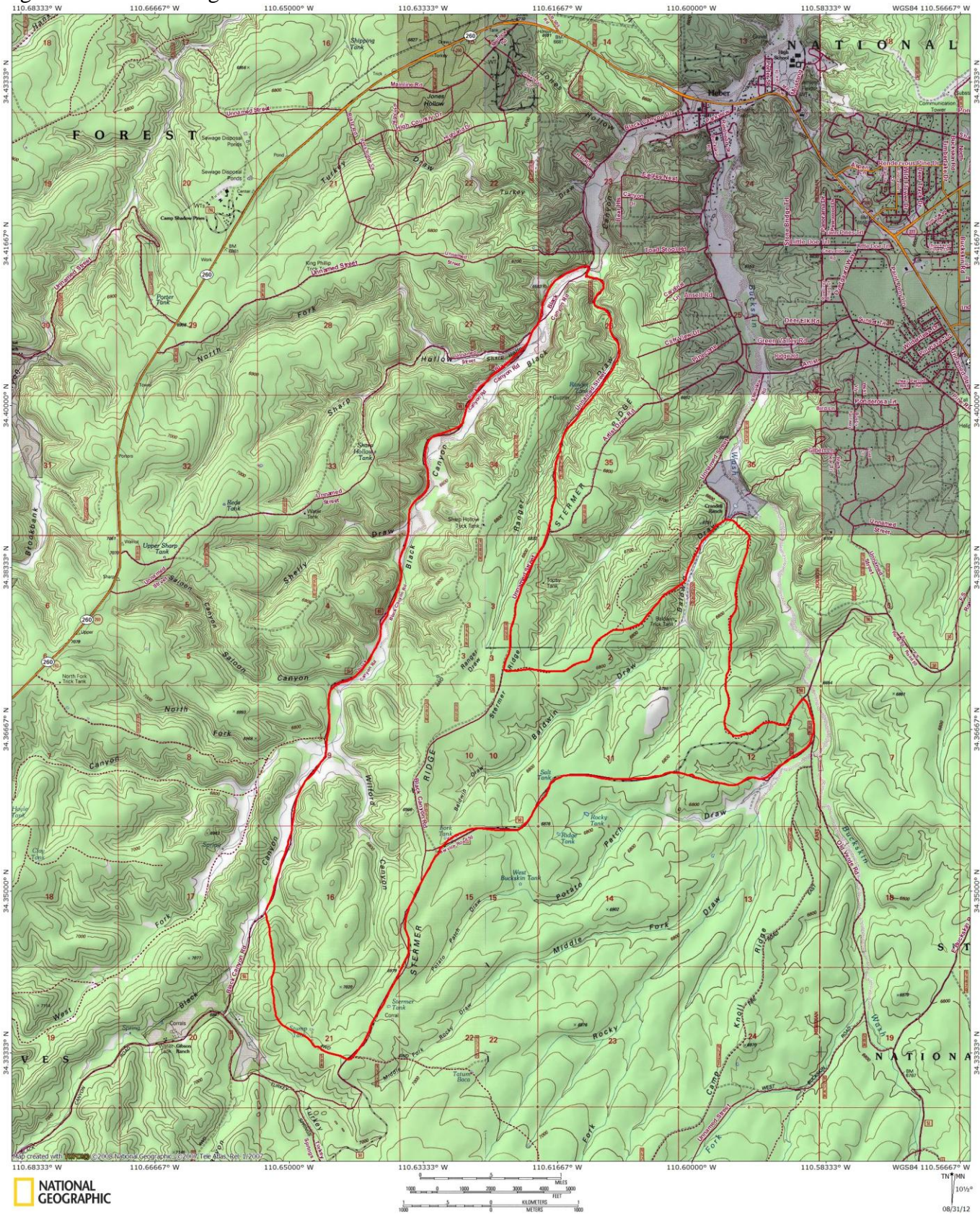


Figure 3: Photo of habitat found within Stermer Ridge Burn Block



PROJECT COMPLETION REPORT TO BE FILED BY:
Paul Greer